

Ancistrus cuiabae Knaack, 1999 (Siluriformes: Loricariidae: Ancistrinae): First record for the Southern Pantanal

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ABSTRACT: *Ancistrus cuiabae*, an easily identified species of armored catfish from the Upper Paraguay River basin has recently been described from the Cuiabá River basin. Its distribution was previously restricted to the state of Mato Grosso. However, here we report the southernmost record of this species, the first within the Mato Grosso do Sul State.

The genus Ancistrus comprises armored catfish belonging to the subfamily Ancistrinae, which differs from the other Loricariidae family members by the presence of inter-opercular spines known as "rosetas" and by the fleshy tentacles around the snout. These tentacles are located on dorsal region of snout in adult males. Currently, this genus comprises 63 species within the Neotropics (Eschmeyer 2014). Ten of them are recorded from the La Plata River basin and three from the Upper Paraguay River basin (Bifi et al. 2009). Among these species, Ancistrus cuiabae Knaack, 1999, was described a little more than a decade ago. When alive, it is identifiable by brown to reddish brown coloration and by the presence of pale spots all over the body (Figure 1), including the ventral surface and the fins (Knaack 1999). Morphometrically, this species differs from its congeners by the proportion of mandibulary teeth row about 13.4 to 15.5% of the total head length (Bifi et al. 2009). Here we report the first occurrence of Ancistrus cuiabae in the southern Pantanal, Mato Grosso do Sul State.

According to the literature (Veríssimo et al. 2005; Mariotto et al 2009) and the SpeciesLink database (http://splink.cria.org.br/), the distribution range of the species was previously restricted to the outskirts of its type locality in the Cuiabá River basin in Mato Grosso. The first recording of the species in Mato Grosso do Sul occurred on November 25, 2012, with the capture of two individuals in the Vermelho River (19°36′58.8" S, 56°56′08.8″ W), a tributary of the Miranda river located in the Upper Paraguay River basin. Using a seine net, the specimens were captured on a beach embankment, about 8 km from the confluence with the Miranda River (Figure 2). This sample was authorized under License 22119-2/2012 issued by MMA/Chico Mendes Institute for Biodiversity Conservation (ICMBio) /SISBIO. Abiotic data taken at the time of collection were as follows: pH 6.98; temperature 29°C; dissolved oxygen 5.27ppm. Individuals were preserved in 10% formalin, transferred to 70% hydrated ethanol, and then deposited in the Zoological Collection of the Universidade Federal de Mato Grosso

do Sul under voucher ZUFMS PIS-3620. Both were males (Figure 3), an adult (TL=12.42cm; SL= 9.51cm; weight= 27.74g) and a juvenile (TL=6.4; SL=4.88; weight= 3.01g).

Although occasional collections have been made in the same region where A. cuiabae was found since 1992, this is the first confirmed sighting of this species in Mato Grosso do Sul State. Another individual of the same species was previously collected at the confluence of the Vermelho and Miranda Rivers in September 2011, but the specimen was lost. A great flood occurred in that year in the Pantanal, connecting different environments through waterlogging. Thus, it is possible that this event caused the species to colonize some 360 kilometers from its original distribution range. Alternatively, it could be hypothesized that dispersal may have occured as a result of release by local bait sellers who sell fish brought by fishermen from various locations in the Pantanal, including the Mato Grosso State. Regardless of the manner of dispersal, this new distribution record for A. cuiabae, as well as the recent description of this species, only reinforces the need to spend more research effort on investigating different regions of the Pantanal in order to learn about and preserve the fish fauna belonging to one of the world's largest floodplains.



FIGURE 1. Live *Ancistrus cuiabae* collected in the Vermelho River.

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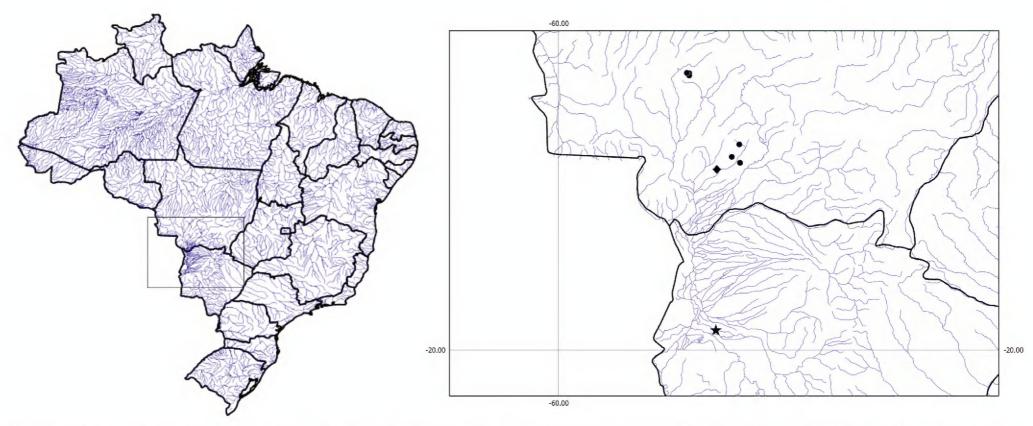


FIGURE 2. Current distribution of the armored catfish *Ancistrus cuiabae*, including the new record for Mato Grosso do Sul State. Star = type locality; circles = distribution registers extracted from the SpeciesLink database; diamond = new register.

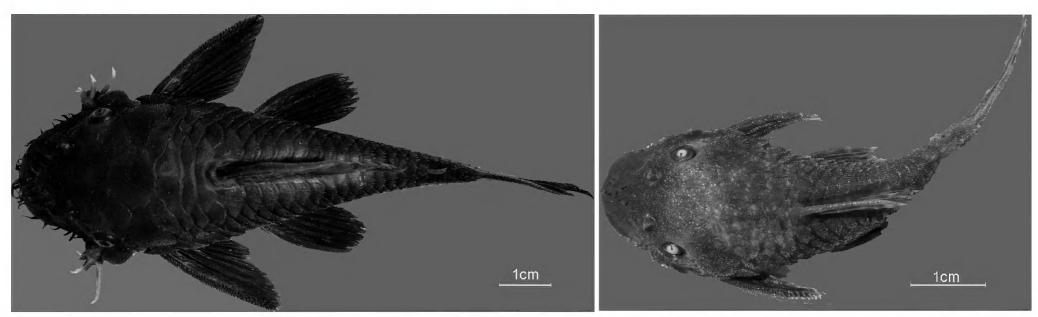


FIGURE 2. *Ancistrus cuiabae* specimens deposited in the Coleção Zoológica de Referência, Universidade Federal de Mato Grosso do Sul, voucher ZUFMS-PIS 3620.

ACKNOWLEDGMENTS: PS and EASM are funded by Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). The authors are grateful of the valuable contributions of the two anonymous referees.

LITERATURE CITED

Bifi, A.G., Pavanelli, C.S. and Zawadzki, C.H. 2009. Three new species of *Ancistrus* Kner, 1854 (Siluriformes: Loricariidae) from the Rio Iguaçu basin, Paraná State, Brazil. *Zootaxa* 2275: 41–59.

Eschmeyer, W.N. (ed). *Catalog Of Fishes: Genera, Species, References*. Accessible at http://research.calacademy.org/research/ichthyology/catalog/fishcatmain.asp. Captured on 19 February 2014.

Knaack, J. 1999. New *Ancistrus* species from the Rio Cuiba system, Brazil (Pisces, Siluriformes, Loricariidae). *Tropical Fish Hobbyist* 47: 150–155

Mariotto, S., Centofante, L., Miyazawa, C.S., Bertollo, L.A.C. and Filho, O.M. 2009. Chromosome polymorphism in *Ancistrus cuiabae* Knaack, 1999 (Siluriformes: Loricariidae: Ancistrini). *Neotropical Ichthyology* 7(4): 595–600.

Veríssimo, S., Pavanelli, C.S., Britski, H.A. and Moreira, M.M.M. Fish, Manso Reservoir region of influence, Rio Paraguai basin, Mato Grosso state, Brazil. *Check List* 1(1): 1–9.

RECEIVED: August 2013 ACCEPTED: March 2014 PUBLISHED ONLINE: May 2014

EDITORIAL RESPONSIBILITY: Rubens Pazza